Electricity on the Farm

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A MONTHLY MAGAZINE FOR THE UP-TO-DATE RURAL FAMILY

AUGUST 1937

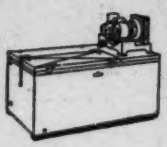
What is your title for this picture?

(See inside back cover for rules of cash prize contest)

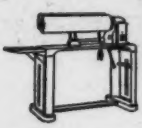
In This Issue

**Saving Space and Waste by Hay Chopping
Harvesting the Milk Crop—A New Method
Seed Corn Drying—and many other features.**

GET A "G-E"
YOUR BEST GUARANTEE



G-E refrigerated milk-cooling equipment has an unequalled record for long-life, low-cost, dependable operation. Ask your dealer



G-E home laundry equipment cuts laundrying time in half, cleans and irons clothes thoroughly, and preserves their life. Shown are washer and ironer

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G-E portable farm motors operate ensilage cutters, feed grinders, wood saws, hunkers, shredders, etc.

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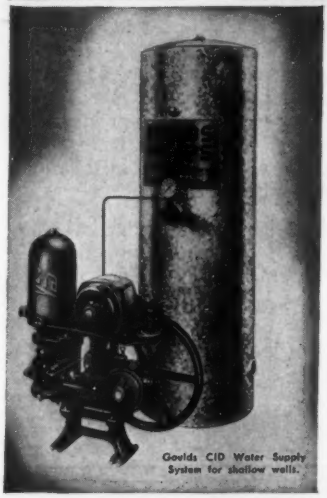
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August, 1937

Electricity on the Farm

Vol. 10, No. 8

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EDITORIAL

MORE OUTLETS NEEDED

Probably the most common mistake made in laying out the wiring system for the home is providing too few convenience outlets.

One base receptacle may have been sufficient for a room in the days before illuminating engineers established new concepts of efficient lighting and before manufacturers placed on the market the vast array of appliances that today do so much to increase the convenience and comfort of the home.

But the modern home needs several receptacles in each room if full benefits of lighting and use of appliances are to be enjoyed, and if wires strung along baseboards and under rugs are to be eliminated.

For example, three or four persons may wish to read or sew at the same time, and if individual lamps are not possible of operation at the same time, due to a scarcity of outlets, the glare from a ceiling fixture may have to be endured.

Of course, multiple plug-ins in a single socket may be used, but the result is a maze of lamp cords strung over the floor, with the attendant danger. For cords placed where they may be continually trod upon represent a real fire hazard!

To make extensions after the system has been completely installed means unnecessary expenditure. Additional, and frequently parallel, circuits must be run from the panel box in the basement or on the ground floor to take care of new outlets installed in other parts of the building. Had these outlets been put in when the original job was done, a better balanced, more satisfactory installation would have resulted.

At the time the wiring layout is being formulated, it is sound planning to provide for even more convenience outlets throughout the house than it is believed will be needed for lights and appliances. There never has been a house with too many such outlets!

FRED SHEPPERD

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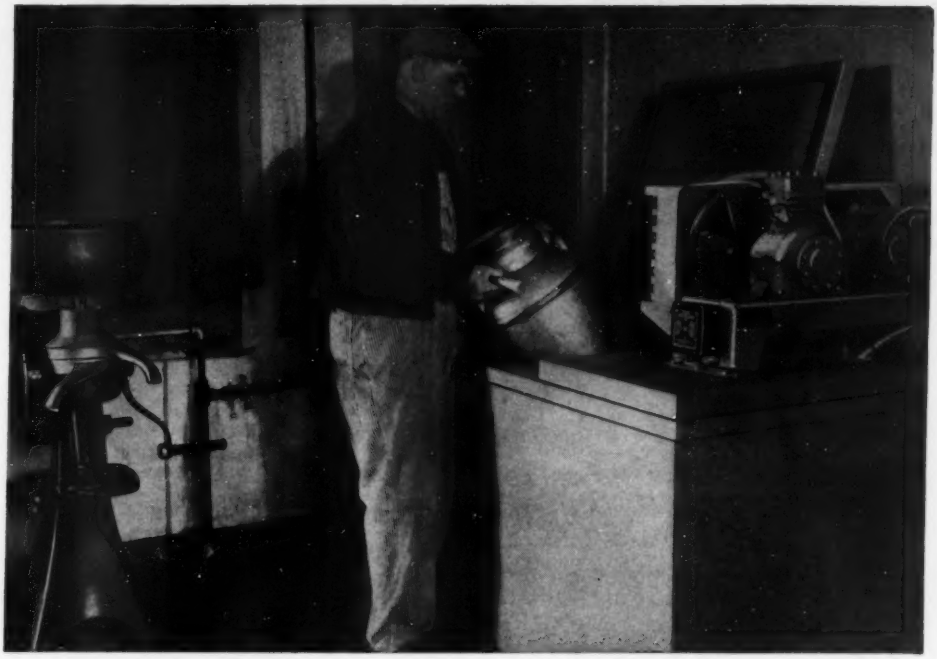
Keep Your Milk Fresh in a McCormick-Deering Cooler



Edward Beyer, Waterloo, Wis., relies on the McCormick-Deering Milk Cooler to keep his milk and cream from spoiling. He also finds the McCormick-Deering Cream Separator, shown at the left, a valuable investment.

DAIRYMEN who have McCormick-Deering Milk Coolers don't worry about milk and cream souring in hot weather. **In less than an hour,** McCormick-Deering Milk Coolers cool the milk **below 50 degrees** and hold it at the right temperature to stop bacteria growth. And they are able to cool their **full-rated can capacity twice** every 24 hours.

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Don't be satisfied with anything less than McCormick-Deering efficiency in a cooler, milker, or cream separator. Each of these McCormick-Deering products is a paying investment—a real aid in helping you make the most money with your herd. See the McCormick-Deering dealer now for a demonstration.

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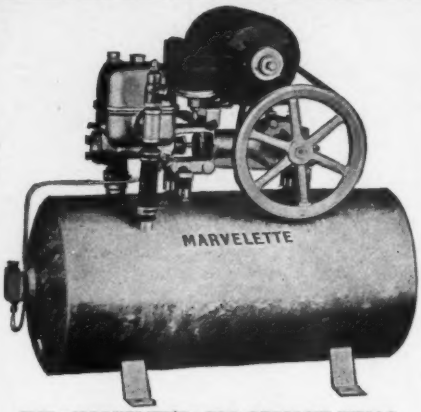

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Chopping Hay at Purdue University farm.

Saving Space and Eliminating Waste by HAY CHOPPING

By J. C. SCOTT
Agricultural Engineer

IN discussing the general subject of hay chopping among farmers, one gets many different ideas concerning both the advantages and disadvantages of this practice. I have finally come to the conclusion that the only fair way to deal with the subject is to make an honest effort to include in the discussion the principal pros and cons, and the reasons for both.

The most enthusiastic man with whom I have talked concerning the advantages of cutting hay, is Mr. William B. Cook, dairyman who lives near Arlington, Washington. Mr. Cook had used a 5 h.p. motor, not only for cutting 12 tons of oat hay and 15 tons of straw, but also to put up 160 tons of silage. All this was done at a cost for current of about $5.

In reply to my inquiry about cutting oat hay Mr. Cook said: "Come up into the loft and I will show you why I like it so much better."

When we got into the loft he called my attention to the fact that the hay was packed good and solid, and he said:

"For some reason this oat hay seems to be packed so hard that the mice do not work through it as they do the long or uncut hay—and there are plenty of mice on the place too. They have given me a lot of trouble in the years before I started cutting the grain hay.

"Another thing," Mr. Cook continued, "it is easy to blow the hay into the loft with the silage cutter. The stock eat the cut hay with less waste; in fact, with no waste at all.

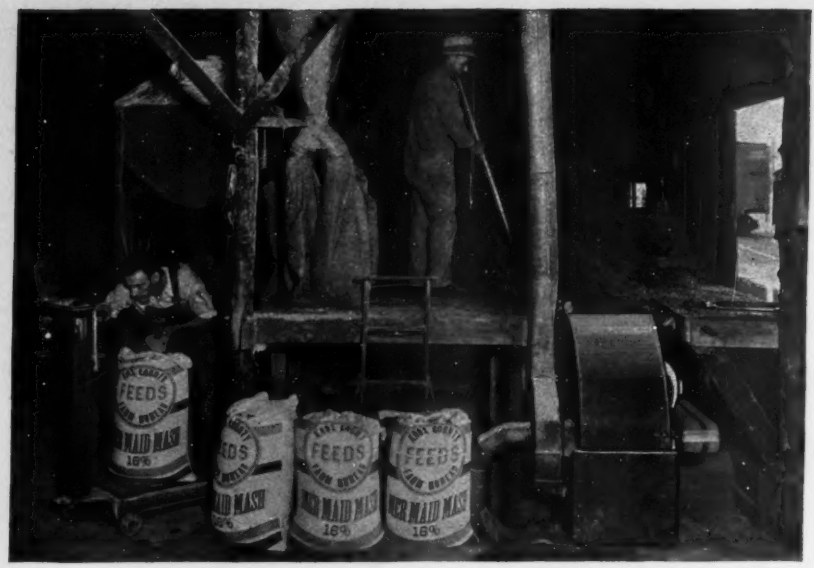
"Cut hay takes much less space in the barn than the long hay, so if your barn is strong enough, you can get considerably more hay into it by cutting."

Hermann Lohse, dairyman near Sedro Woolley, Washington, has been cutting hay for several years, and when I asked him if he would recommend that farmers cut hay, his answer was: "Now that all depends."

He told me that the reason he is cutting hay is that he usually has oat hay or some other coarse hay, and the waste is eliminated, as the stock eat all the cut hay while they will not clean up nearly all of the same hay if left uncut.

Mr. Lohse says another advantage to cutting hay is that you can get nearly twice as much hay in your loft.

"Since I do not have enough loft space to store



Grinding alfalfa hay and mixing farm feed at the Knox County Farm Bureau, Vincennes, Indiana.

all the hay I need for the cattle, this is another important reason why I cut the hay."

Mr. Lohse called my attention to the fact that cut hay must be cured well before going into the barn, and that the barn should be fairly tight, as hay in an open, shed-type barn will draw moisture enough to cause trouble.

Mr. Lohse prefers a 7½ h.p. electric motor to the 5 h.p. motor when electric motors are used on a 13-inch silage cutter for cutting hay and blowing it into the loft.

Near Nooksack, Washington, I visited Carl F. Brown, dairyman who has, for a number of years, been using a No. 7 hammermill to chop his hay.

"One advantage to the hammermill in cutting hay," advises Mr. Brown, "is that any foreign matter such as hardware or baling wire which happens to get into the mill, is beaten up and rounded off at the edges in such a way that it does not cut or injure the cow's stomach.

"I saved enough by chopping oat and pea hay the first year, to pay for the hammermill. If a little molasses is added to this mixture, it surely makes a wonderful feed. However, the saving is made by grinding the hay up so the stock will eat it all, especially in the case of coarse grain hay such as we have.

"We do not store our hay cut as many farmers do, but cut it during the winter at intervals of two or three weeks, cutting only enough for that period of time."

During my conversations with various farmers who have cut hay, other advantages were mentioned. One of these is that there is no work in hot, dusty mows during hay time, as it is not necessary to tramp the cut hay when it is blown into the loft. Also, the hay when cut is very much easier to take out of the loft, according to statements of some farmers, and this materially reduces time and labor in doing chores during the entire winter. Some say hay can be put into the barn much faster and easier by the chopping method, because the chopper blows the hay into the barn the same as it blows the silage into the silo.

The chopped hay is better for pigs and poultry in that it can be eaten much easier, and, according to the Idaho Experiment Station, lambs wasted 23% less alfalfa when it was fed in the chopped form. 225 pounds less hay was required for each 100 pounds of grain, with chopped hay.

Experiments at the Purdue University Agricultural Experiment Station, Lafayette, Indiana, indicate that hay containing 19% moisture at the time of cutting and storing, came through the storage period with good green color. Hay containing 25% moisture was slightly spoiled, and with 30% moisture the hay was badly charred. It was the observation of the experimenters that 22% is probably the limit to the amount of moisture hay should contain when going into the mow, if cut in one-inch lengths.

"Hay should be distributed in the mow by adjusting the roller, and should not, under any conditions, be packed or tramped."

In discussing further the moisture content of the hay, the experimenters say that "when the hay containing 30% moisture (which was badly charred), was fed to dairy cows, it produced digestive disturbances which caused a marked decrease in their milk production.

"There is danger of spontaneous combustion when hay containing high moisture content is stored in barns.

"It should be remembered by farmers who contemplate storing cut hay, that chopped hay cannot be successfully stored when partially cured. Statements to the contrary are not based on facts. Hay that is to be chopped and stored should be as dry or drier than long hay, as it is normally stored in barns."

Another point that must be taken into consideration is that since it is possible to get much more cut hay into the loft than is the case with long hay, the barns and lofts should be strengthened to take care of the extra weight.

The Indiana Experiment Station reports that by cutting alfalfa, 55% of the mow space was saved.

"Most of the hay stored in these particular studies was of good quality, and no significant saving in feed was observed. However, there would undoubtedly be some saving in feed by chopping if the hay were coarse.

"It required 2 kilowatt hours of electric current per ton to chop and blow the hay into the mow.

"It required slightly less time to store hay that was chopped than to store the long hay."

Fan and furnace in the seed corn house of C. E. Troyer, La Fountaine, Indiana.

A NEW METHOD of SEED CORN DRYING

By MRS. C. E. TROYER
La Fontaine, Ind.

FOR the last few years weather conditions have been very unfavorable for the production of good seed corn.

The public has also just awakened to the merits of hybrid seed. These two factors have made the demand for good seed stonger than ever before.

For nearly thirty years our farm has been devoted almost entirely to the production of seed corn.

We used to dry in racks and in 1926 we built what was at that time considered a modern seed house. It was heated by a base burner.

Four years ago we were able to get electricity on our farm. Then we added adjustable window ventilating fans operated by electricity, also an electric heater and a half-horse power motor to operate the sheller and grader. We felt that we were quite modern. All the buildings were wired for lights and a range, refrigerator, washing machine, iron, radio and numerous other small gadgets were added to the home equipment.

For more than ten years Mr. Troyer has been experimenting with hybrid seed corn and producing it on his own farm. For several years now he has produced it on a commercial scale.

Last year we decided to go modern in a big way in order to care for our increased volume of business.

The Wisconsin bin type of drying has been used in western states for a few years but until the last two years was entirely new to Indiana.

Our building is made of buff hollow tile blocks These are moisture-proof and make a very warm building. The building is 30 x 50 feet and three stories high.

On the second story are six bins holding 100 bu. each of ear corn. The corn is brought in from the field and the load driven into the building. An elevator takes it to the third story and dumps it into the bins.

The building is equipped with a furnace built especially for this purpose. Hot air circulates

Upper: Seed corn sheller and belts for sorting out and discarding bad seed in the Troyer seed corn house.

Center: Exterior view of the seed corn storage and drying house of C. E. Troyer, La Fountaine, Ind.

Lower: Elevator shafts and drying bins for corn in the new Troyer seed house.

Using corn grader in the new seed house constructed on the Troyer farm near La Fountaine, Indiana.

over it and is blown through a steel jacket up around the corn bins. These bins have adjustable doors above and below which can be regulated to make the heat pass over or under the corn.

A blower type fan which revolves at the rate of 450 revolutions a minute keeps this air going through the corn.

The moisture laden air passes out of the window. The elevator is operated by a three horsepower motor and the blower fan is operated by a five horsepower single phase motor. This motor costs about fifteen cents an hour to operate.

The furnace is equipped with an electrically operated stoker and a thermostat. The corn was dried at a temperature of 106 degrees and in the two months the plant was in operation it never varied more than one degree.

This is very important as too high temperature would injure the germination of the seed. About 48 hours was required to dry the corn down to thirteen percent moisture.

Where corn is dried to thirteen percent it is safe from freezing temperatures and molds will not develop.

After the corn is dried it is shelled and sorted by the belt method, run into bins, then graded and bagged.

Hybrid corn has a different sized grain from most of the old-type seed and machinery companies are putting forth a special effort to make plates for corn planters to take care of the different sizes and types. The grader sorts it into these different sizes.

With the past few seasons favorable to the development of molds the corn is treated with a mercury dust to check further mold growth.

The sheller, grader and treating machine are run by small motors.

Seed House Well Lighted

The building is equipped with many lights and flood lights outside which are very important, because during the month of October the plant is running night and day.

Our electric bill for the month of October was a little over eighty dollars but it was the cheapest help we had.

We are already planning an addition to the plant and also a new home which we hope to have completely modern including electric water heater, dish-washer, ironer, stoker and air conditioning.

These things would not have been possible without electricity.

We feel that no other one thing can do as much to improve the standard of living for the farmer.

A clean and easy harvest in a sanitary milking room.

HARVESTING THE MILK CROP

By ANDREW APPLEBY

As labor-saving machinery has been introduced into factories, the workers get better wages, largely because machines help them to produce much more and at lower cost than is possible by hand. In farming, too, so far as mechanical power has been adopted, it has greatly increased the output per man and reduced production costs. But there is still too much hand labor in farming, especially in the dairy business.

Suppose a man has 15 cows each giving milk 10 months of the year and dry the other two months. How do the importance, the value, and the labor of harvesting this milk crop compare with the importance, the value, and the labor of harvesting other crops on the farm?

Good cows can be expected to produce 6000 pounds of milk a year. From this little herd, that is 45 tons of milk,—the same weight as 1500 bushels of wheat or potatoes. Of course the price goes up and down but it is usually higher pound for pound than other farm products and will therefore justify as much investment.

Year in and year out the average man will harvest about 75 lbs. of milk an hour by hand. On a spurt he can double that and when the cows are fresh maybe he can treble it. But 15 cows twice a day for 300 days apiece means 9000 milkings to do. It would take seven miles of stanchions to hold that many cows. And 120 ten hour days, 4 solid months, to milk them.

In this day and age no one would think of going out to cut 45 tons of hay with a scythe, or to rake it up with a hand rake. Some men would hesitate to pitch that much hay into a wagon and more shun pitching it up into the hay mow or onto a stack.

Who would cradle a field of wheat yielding 1500 bushels, or bind it by hand, or thresh it with a flail? For that matter, who would even dig 1500 bushels of potatoes with a fork though he could roll out many times 75 pounds an hour?

Reducing Cost in Dairy Business

Machines have lowered the cost of producing and harvesting all these crops, and milking machines now offer a fine opportunity to increase profits by reducing cost in the dairy business.

With the rapid spread of electricity, motor driven milking machines are becoming standard equipment on the best of dairy farms all over the country. Better and more efficient machines and a better understanding of their use, care and cleaning have greatly increased their popularity.

Mechanical milking is no longer blamed for all misfortunes from the fleas on the dog to the elopement of the hired man with the daughter of the family.

The labor and money savings have been tested at many experiment stations. Kansas found the machine saved four hours a month for each cow milked. Iowa discovered that a man harvested 158 lbs. of milk per hour by motor instead of 73 by hand. It usually works out that mechanical milking is twice as fast as hand work in spite of the extra time needed to clean the machine.

Machine Milking Nets Saving

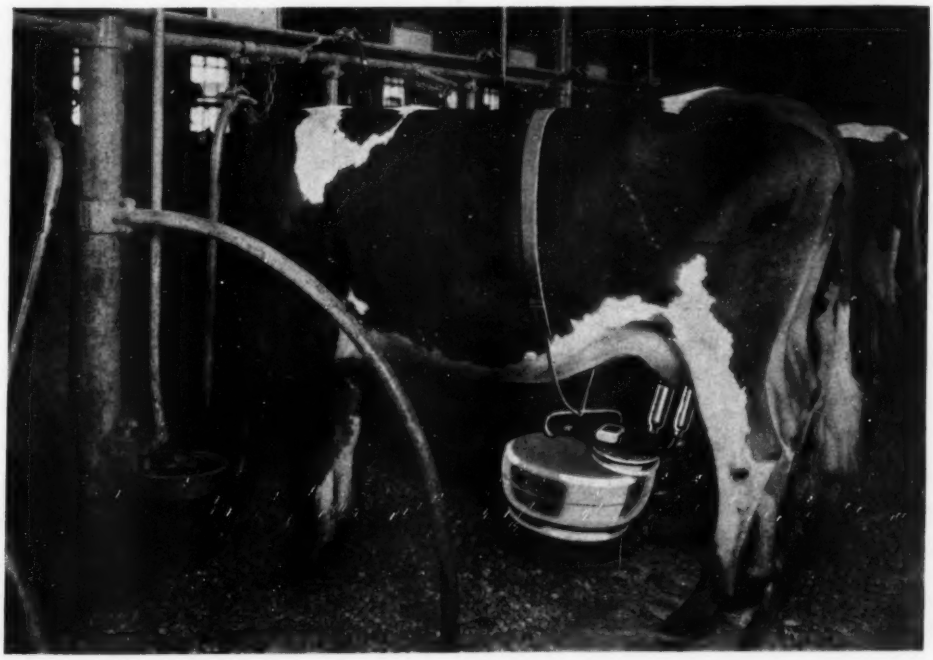
With labor figured at 25 cents an hour, the Iowa tests on a herd of 22 cows showed the labor cost $5.95 less per week for motor milking. When interest and depreciation on a very high investment, repairs, replacements and double the usual amount of power were included, the weekly saving by machine milking was still $2.64, or about 24%. This is clear cash profit after everything was paid for.

The milking machine extracts milk by the same means with which Mother Nature has endowed the calf—suction. Furthermore, the milking machine has a squeeze and massage action similar to that of a calf when it swallows. Try swallowing, and observe that the tongue presses tightly to the roof of the mouth. Just so, the calf in swallowing squeezes and massages the teat and the milking machine does the very same thing. But a calf does more than suck and massage the teats. It tugs and jerks and bunts, thereby stimulating and manipulating the udder. A good hand milker tugs and pulls and stimulates the udder too. A good milking machine is likewise capable of applying a tug and pull—gentle in the case of a first calf heifer, but more vigorous for a hard milker or a stripper.

With the milking machine, the milk is drawn into a sealed container, hence no hair, scurf, or dirt from the cow's body gets into the bucket to contaminate the milk. Low bacteria count and low sediment test milk is more easily produced with the milking machine than by the best hand milking methods. Dairy inspectors welcome the use by dairymen of milking machines that are scrubbed and kept clean after each milking. Cows take naturally to the modern milking machine, responding with their full flow of milk. Many of the country's highest producing herds have made their records on machine milking.

Milking by machinery is not as hard work, either.

Profits come from good cows and good equipment.



A KITCHEN FOR KATHERINE

By VERA B. MEACHAM

WE got out of the car at the gate and walked up the flag stone path to the old stone farm house. Pink hollyhocks bloomed against the blue-green blinds and nodded at us from either side of the door.

"That's the kitchen over there," said Ellen Selton in a low voice, pointing to a window on the south with red ramblers climbing across the screen.

I looked at it with interest but before I could answer, Mrs. Jorns, a pretty young woman in the middle twenties opened the door.

"Good afternoon, Mrs. Selton, come right in," she said cordially. "This must be Mrs. Meacham. I'm awfully proud to have you come out to look at my kitchen."

"I know I'm going to admire it," I answered, "Everyone's been telling me how lovely it is."

The sound of voices, hushed at our approach, broke out beyond a door across the room.

"I hope we haven't come at an inconvenient time," I added in some dismay.

"Oh, no. It's just some of the folks. Come right on in," leading the way out into the big roomy kitchen.

"Oh, Kitty," exclaimed Ellen, "it's just a picture."

In the end of the room at the left of the door was all of the working equipment arranged in the shape of a U with the sink at the base. At our right was a table, a home made desk of pine with a shelf of books above it, and several chairs, all occupied, I saw, by a friendly looking group of women who were busy knitting or sewing.

"This is Grandma Tobin," Katherine nodded toward a white haired woman who sat in a low rocker under the west window knitting a rose colored sweater. Her snapping brown eyes surveyed us calmly as she spoke.

"And this is my sister Mary." The pleasant faced woman holding a baby bowed with a smile. "And this is Mrs. Bestor, and this," Katherine moved toward a grim looking woman standing at the back door, "this is Mrs. Abernathy who lives across the road. Mrs. Selton has brought Mrs. Meacham out to see my kitchen."

"And a lovely place it is, too, isn't it?" I said enthusiastically. "Did you plan it yourself?"

"Yes. Don and I together. The University had extension classes in the town where I was teaching, and I went to night school and studied how folks are arranging kitchens nowadays. Don made all of the cabinets and we helped each other with the painting."

I did not wonder she was proud. It was a beautiful room. The wood work and walls were delphinium blue. The curtains a lovely warm yellow. On the floor was a heavy linoleum that had both the yellow and the blue in its mixed design.

"I don't believe I have to take a single unnecessary step in getting a meal," Katherine explained

Left: Electric cooking is safe.

Right: It is easy to reach out your finger and turn a switch to build a fire.

Below: One of the reasons for better results with electric cooking is measured heat in the cooker, on top of the range, and in the oven.

proudly. "I've got straight line production here, just the way they say to have it. I mean I have the refrigerator near the back door, the sink at the end between it and the range,—which is near the dining room door—if we ever do eat in there, and near the table out here where we eat now. There is enough storage space and work space near each preparation center to take care of the food and supplies and dishes."

"You have certainly arranged things well," I said admiringly. "And that is a very good stove you have there. I would be glad to have you tell me how you like cooking with electricity." I was moving over to examine the stove when I was surprised to hear a very perceptible sniff from the women at the door.

"There was a good stove in this kitchen before Kitty ever started turning things upside down. Don's mother cooked on it for twenty-five years to my certain knowledge, and there wasn't a better cook in Outagamie County than Sarah Jorns."

"More than twenty-five," corrected Grandma Tobin placidly, "it's nearer thirty. She got it the year Mary Ellen had the whooping cough, and Mary Ellen was just three then."

"Well, twenty-five or thirty, 'twas a long time and it'd a done Kitty and Don a good while yet."

"That stove outlasted Sarah, all right," Grandma Tobin nodded, "but I dunno's I'd advise Kitty to wrastle with it. You had to know that stove to get on with it. Now these electric stoves are different. Anyone can cook on them—even a school teacher." With a sly little twinkle at the girl.

"There isn't any call, as far as I can see, for you women to go off half cocked with these electric stoves," argued Mrs. Abernathy. "New fangled nonsense."

Grandma Tobin snorted.

"We wouldn't be sitting around here in this kitchen talking if Kitty were cooking that meat loaf and baking her bread in that old cook stove. Not on any August afternoon. You may be warm standing there in the sun, but you don't feel any heat from that range, Esther Abernathy. No, you don't. It is all shut up in the oven where she wants it. You could go over and lay your hand on that oven anywhere—if you weren't too stubborn to try it."

The Abernathy woman tossed her head, but before she could reply, Mary spoke up.

"Everyone who cooks with electricity blesses its coolness this time of year, but I think the very nicest thing about electric cooking is that it is so safe. The twins are just the age when they're curious about everything and the baby's beginning to walk, so I'm glad to be able to go about my work without worrying for fear they are going to get burned, or that they will get hold of the matches and set themselves on fire. There are no matches in our kitchen."

"Even if they got to playing around the stove," put in Katherine "they couldn't do anything more serious than turn on a burner. There is no danger in that; only the loss of a little current."

"Another thing," Mary went on. "It doesn't take a lot of time. When I get things ready to cook, the fire is ready for them. I don't have to build it or wait for it. It is ready when I want

Left: Cool cooking is clean cooking in a modern kitchen.

Below: Don and Kitty planned their kitchen with a model like this, arranging and rearranging the blocks that represent the range and the refrigerator and the sink until they got the best arrangement for the space in their kitchen.

it, and it cooks my food just as fast as that food will cook.

"I like a good fire I can see, and can get for nothing. John gets up the wood, hauls it, saws it and splits it all himself so it doesn't cost a thing," growled the woman at the door, unhooking the screen as though she were about to go, but turning to listen as Mary went on.

"Whether you think it costs anything to cook with wood or not, I'll bet John does. We don't think it cost us very much to cook with electricity. It isn't like a wood fire. You can get just as much as you need for any sized job, baking a turkey or warming the baby's bottle, and you can't turn it right off on the dot when you're through with it. You can't save half an armfull of wood after the kettle boils. It keeps right on burning up whether you need it or not."

Katherine broke in eagerly.

"We talked to just lots of folks before we decided on buying an electric range, and all of their reasons for doing it were convincing. I wanted one because it is the most modern way of cooking. Don said he'd be glad to turn over the splitting and lugging fire wood to the power company; he could make more at something else. I knew I'd be busy enough anyway. There's plenty that has to be done on a farm. It seemed a shame to start out with jobs like building fires and carrying ashes that aren't really necessary any more."

"Well, I got mine cause it'd save me work, too," said Grandma Tobin, unexpectedly. "I never thought when I was married that I'd live to see the day when all I had to do was reach out my finger and turn a switch to get a fire in my stove. I can have one in a minute, and I can have the kind of fire I want, a hot fire till I get the potatoes boiling, then a low one, just enough to keep them boiling till they're done. And all I have to do is reach out my hand and turn a knob and I can have a hot oven, or a medium oven, or a slow oven, just depending on where I twisted that knob on the dail. I don't have no more of what Kitty here calls kitchen travel to keep stuffing in wood or poking at the fire. It don't tire a body much to reach out and turn a switch, now, does it?"

We smiled our agreement to this and Grandma Tobin went on.

"And being how I'm getting kind of forgetful, I like the little alarm clock that tells me when

the potatoes are cooked or the cake ready to come out."

Esther Abernathy looked incredulous.

"Yes, Mrs. Abernathy," said Katherine pointing to a circular dial on the back of her range. Lots of times I set it when I put my baking in then go into the living room or upstairs to do up the work. I can even hear it out in the garden."

"Well, the thing I like best about my electric range," she hadn't spoken before, not more than a shy greeting when we first came in, so we turned toward Mrs. Bestor in surprise. "The thing I like best about electric cooking is that it is so clean."

"You would, Martha."

I was somewhat at a loss to know why everyone laughed at that, and the woman called Martha flushed a little.

"That's just what she would like best, Vera," explained Ellen. "Martha is the perfect housekeeper. This woman you see before you is the scourinest, scrubbinest, sweepingest person anywhere around. If anybody's set on going about eating off floors, which I never was, Martha's floor is the one I'd recommend."

"Oh, you go on," said Martha half pleased, half annoyed. "I just want to tell Kitty that she's mighty lucky to have a stove that doesn't need any blacking, that doesn't have to have its stove pipe cleaned, and that won't smudge up this blue paint and have her washing these yellow curtains every few minutes. She couldn't keep her hands looking like that if she had to scour the bottom of a kettle every day. Where would she put a wood box in a kitchen like this? She won't ever have to track ashes all over the floor either. If there is one thing that's worse than sugar on the floor, I think its ashes. I can't stand them."

"I know I'm lucky," said Kitty, "And I'm very grateful."

"Probably somebody else is lucky, too," I said, as we picked up our purses ready to go.

"I'd like to have you come into the living room," she said with a smile for the compliment. We were sitting out here because everyone comes to the back door. You know how it is. Pretty near all roads lead to the kitchen on a farm."

Grandma Tobin leaned back in her chair and pushed her glasses up on her forehead.

"Guess you're bound to find out sooner or later," she said, "that when a girl's married, pretty near all roads lead to the kitchen stove."

ELECTRICITY + INGENUITY = POULTRY PROFITS

By R. E. JOHNSON

WHEN the farm agent from the Toledo Edison company called at the Palmer Brothers' Poultry Farm, Route 3, Wauseon, Ohio, he found that the first chapters of his story of farm electrification were already in practice.

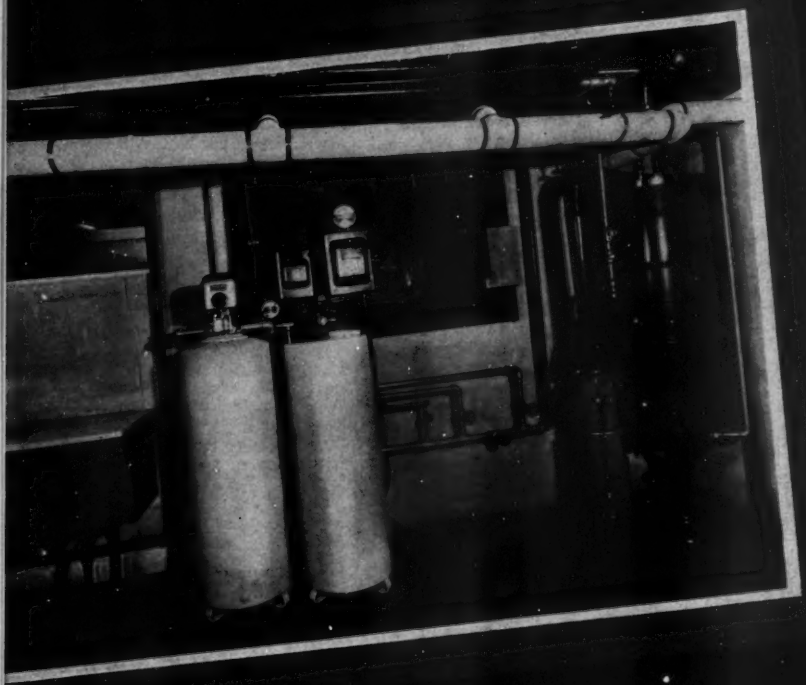
Electricity, combined with a generous supply of ingenuity, plays a major part in making this poultry farm an efficient and productive business. E. E. Palmer and W. C. Palmer, owners and operators of the farm, are strong in their praises of electric power and light for increasing production and saving time and labor.

Feeding 3,500 chickens has been simplified by a ingenious feed-mixer, built by E. E. Palmer and operated by a ¼ HP. motor. The wooden cylinder, 4 ft. in diameter and 2¼ ft. wide, has a 500 lb. capacity. Four agitators, fastened to this barrel, speed up the mixing. The back gearing was taken off an old corn sheller.

By preparing the mixtures on the farm, the proportions of the various feeds can be changed daily if advisable. About 1500 laying hens, kept for winter egg production, also profit from the

(*Continued on page 29*)

W. C. Palmer feeds his eleven week old chickens a special mixture prepared in his feed mixer.



GOOD WATER SUPPLY—GOOD SANITATION

Effective sanitation on the farm is dependent upon a convenient and sufficient supply of water. The more convenient the supply, the easier is good sanitation attained.

Upper left: The two tank unit is a water softener, which makes laundry work and other cleansing operations a simple and satisfactory task. Water heater shown at right of the picture.

Upper center: The modern house water system provides hot and cold water right at the kitchen sink.

Upper right: Clean hands are but a moment's task, and a pleasant one, with a modern wash basin.

Lower left: Individual drinking cups for the cows, made possible with running water, represent a real advance in dairy barn sanitation.

Lower center: Plenty of fresh, clean water for the stock when there's no pumping to be done.

Lower right: Washing fruits and vegetables is fun, with water under pressure.

CASH OR CRITICISM?

A STAFF ARTICLE

AROUND Milwaukee, and possibly in other parts of the country, they have a very polite name for second grade milk. They call it "criticized" instead of "Warm," "High-bacteria," or just plain "Dirty." But when they pay for it, they are not quite so polite. For they knock from 50c to 80c a hundred off the price of all milk that is "criticized."

The result is that the farmer producing this milk has the choice of getting a little money and a lot of criticism, including, perhaps, some very good advice on improving his methods, or of receiving 30 to 40% more for his milk if it is above criticism.

Essentials for Good Milk Product

One of the best ways to keep milk out of the criticized class is to cool it quickly and keep it really cold until delivery. That is not the whole story, of course. The milk should come from healthy cows, properly fed; it should be clean, handled in clean utensils and be free from bad flavors and odors. But when all these conditions are met, it is *still* necessary to bring down the the temperature and hold it down to prevent the growth of bacteria.

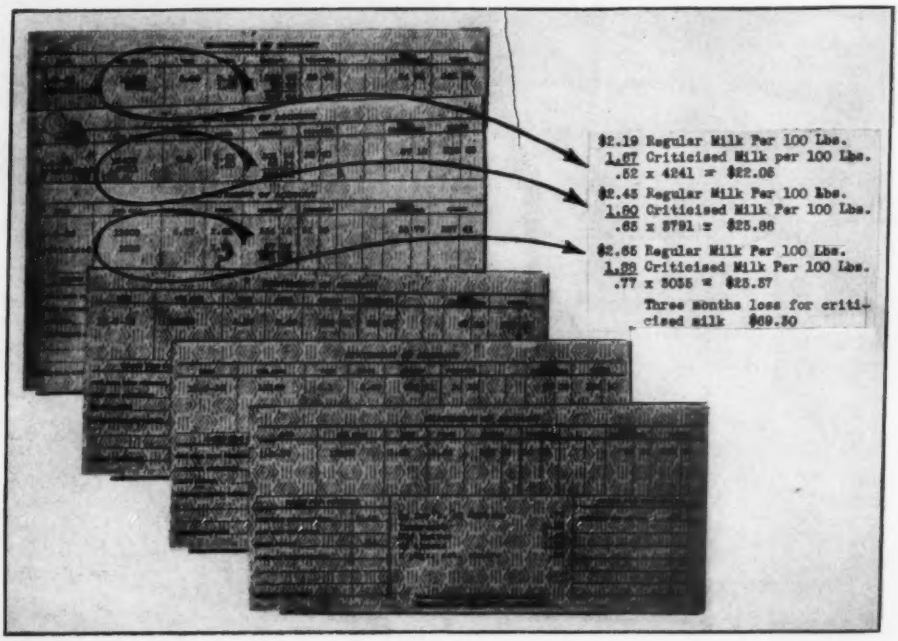
For the less exacting markets such as cheese factories or some condensaries, cooling over an aerator with well water and storing in a tank of water may meet the requirements. But water is not cold enough to insure the highest quality. Until a few years ago that was a job for ice. Now electric coolers do it better and cheaper.

Take the case of Wm. Buemann near Davenport, Iowa. He paid a dollar a day for ice to cool his milk in hot weather, and had to haul it out from town every day. Then he got an electric cooler and his whole electric bill for lights and household appliances as well as the cooler was never over 40c a day.

Not far away was Herman Lord whose ice for milk cooling cost $45.00 a month in the summer. When he changed to electric his biggest bill, in July, for the cooler and all other electric uses was only $13.93. He had better cooling with a lot less labor and the convenience of lights and household appliances for only 1/3 of his ice bill.

Another place where the modern electric milk cooler has returned an actual cash profit is on the farm of Fred Esser near Genesee Depot, Wisconsin.

"My milk goes to the Golden Guernsey Company in Milwaukee," says Mr. Esser. "And last year when my loss on criticized milk amounted to

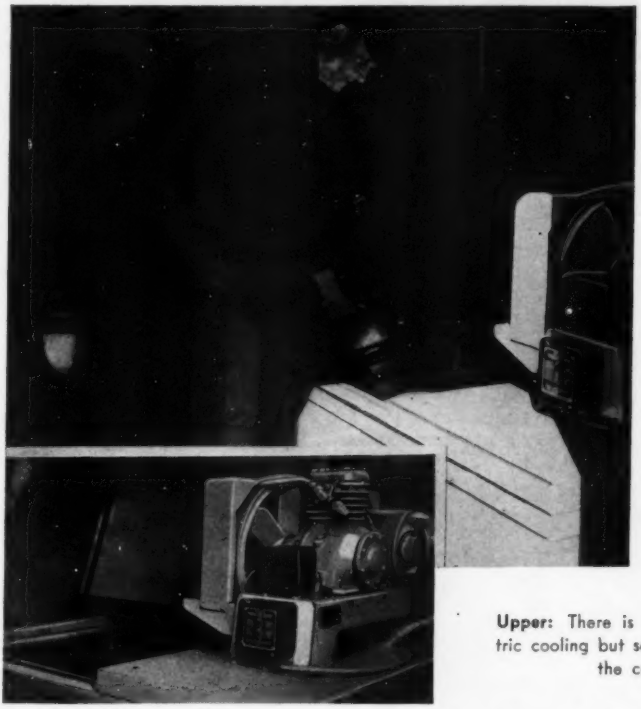

$2.19 Regular Milk Per 100 Lbs.
1.67 Criticised Milk per 100 Lbs.
.52 x 4241 = $22.05
$2.45 Regular Milk Per 100 Lbs.
1.80 Criticised Milk Per 100 Lbs.
.65 x 5791 = $25.88
$2.65 Regular Milk Per 100 Lbs.
1.88 Criticised Milk Per 100 Lbs.
.77 x 5035 = $25.57
Three months loss for criticised milk $69.50

These statements show the losses which electric cooling stopped.

nearly $25.00 a month, I went down there to see what was the matter. They told me my trouble was poor cooling, so I began to learn about electric coolers. I bought one on payments of about $25.00 a month and from the very first it saved almost enough to make the payments. With no other change in operation, or herd, my bacteria count dropped from 250,000-300,000 to 13,000-20,000.

"My outfit will cool 6 cans of milk down to 50 degrees or below in an hour, or even less. The machine itself stirs the water and we do not have to stir the milk at all."

The pictures of Mr. Esser's milk checks show, if you examine the figures, how he stopped his loss with electric cooling. In three months he sent in 11,067 lbs. of milk that was "criticized." The criticism cost him $69.30. Then he started the electric cooler and began to get the cash.



Upper: There is no labor in electric cooling but setting the cans in the cooler.

Lower: Close-up of the neat, compact cooling and stirring mechanism mounted right on the water tank.

Soldering Is Best Way to Repair Farm Utensils

Whenever there is a leaky pail to be mended or any copper or galvanized utensils on the farm with rough spots and corners to be smoothed over, soldering is the most inexpensive and effective method of repair, says H. E. Besley, assistant professor of agricultural engineering at the New Jersey College of Agriculture, Rutgers University.

"The equipment needed to do a good job of soldering," Prof. Besley reminds farmers, "is a soldering copper or 'iron', a means of heating the iron, a scraper, some flux and solder. An electric soldering iron is generally more satisfactory for farm use because it eliminates any fire risk involved by the use of a blow torch or charcoal stove and because it maintains a more uniform temperature."

In regard to the actual soldering procedure, Professor Besley lists the following four points which are essential to successful results:

1. The metal surfaces to be soldered must be thoroughly cleaned. Solder will not stick to grease, dirt or corrosion.
2. The right flux must be applied to the cleaned surfaces to prevent oxidation when heat is applied. Good commercial paste is satisfactory for most metals. It can be bought at any hardware store.
3. The soldering iron must be well tinned. To accomplish this, heat the iron to the point where it will melt solder and rub its surfaces bright with a file. Then apply a little flux and coat the surfaces of the iron with solder.
4. The soldering iron must be hot enough to heat the work to the melting point of solder.

ELECTRICAL HOUSEKEEPING

Conducted by
GAIL MEREDITH

A GOOD COLD DRINK

MY neighbor's little girl likes milk. Ordinarily she drinks it as she eats the rest of her food without fuss or comment, but one day last summer she pushed her glass away fretfully.

"Don' wan milk," she said with a shake of her curly head. "Don' wan white milk."

Being a resourceful mother Jean whisked the

And then she relished it.

glass away before the idea had time to grow into a revolt. She turned the milk into a bowl, added two tablespoons of the cholocolate syrup she keeps in her refrigerator, and beat it up briskly with an egg beater. Betsy watched her with interest and forgot to pout.

"How about this?" her mother asked with a smile as she poured the mixture into a clean glass. "How about some chocolate milk?"

Betsy beamed, reaching out for the glass with both hands. After a good long drink she lifted shining blue eyes to her mother.

"Dub," she crowed, the tip of her little red tongue licking at the brown rim around her mouth.

There are lots of folks who should be drinking milk with their meals, who perhaps like Betsy, get tired of white milk. If there are some in your family, you may like this group of recipes which do not disguise it, really, but do dress it up invitingly. Since most people like chocolate, adding it is one of the easiest ways to transform a duty drink into a treat for the family.

Miss Gladys Stillman, Food Specialist in the Extension Department of the Wisconsin College of Agriculture, offers this recipe for making a cocoa syrup that will be ready to use in a minute.

Cocoa Syrup

½ cup cocoa
1 cup cold water
⅛ teaspoon salt
2 cups sugar
1 teaspoon vanilla

Mix cocoa and ½ cup cold water to a smooth paste. Add the remaining water and cook, stirring constantly until thick and smooth. Add the salt and sugar and boil for about 3 minutes, stirring continuously. When cool, add vanilla. Pour into a clean jar and seal. After each using of syrup, cover jar and seal tightly.

A banana mashed, then beaten into a glass of milk with the drink attachment of an electric beater, or with a Dover egg beater, makes a nourishing drink that children love.

In the circular "Milk Drinks" put out by the University of Wisconsin, Miss Stillman gives a recipe of a fruit drink she calls

Banana Milk Fluff

⅔ cup mashed banana
3 tbsp. orange juice
3 tbsp. honey or syrup
⅛ tsp. almond extract
Few grains of salt
2 cups milk

Mix well and beat with egg beater. Garnish with whipped cream, sprinkle with nutmeg.

Many other drinks, she says, can be made by syrups from canned cherries, raspberries or strawberries.

Cherry Milk Snow

½ cup red cherry juice (from canned cherries)
1 tbsp. lemon juice
1½ tbsp. sugar
Few grains salt
1½ cups rich milk

Mix all ingredients but the milk together and boil slowly for five minutes. Chill, add to the milk and beat well with an egg beater.

Grape Blossom Milk

½ cup grape juice
½ teasp. lemon juice
1 to 2 tbsp. sugar
1 cup milk

Combine ingredients and beat with an egg beater. Serve ice cold.

"Cold drinks," says Miss Stillman, "should be served *cold* if you want to bring out the best flavor.

To mix drinks quickly.

If the milk is kept in the coldest place in the refrigerator, it will be chilled and ready for use in milk drinks."

FRESH VEGETABLES

WITH food authorities at us constantly to serve vegetables, lots of them and often, it is a wise woman who learns to cook them well. For while there are those who can coax a charm out of carrots their growers never suspected, there are plenty more who keep right on drowning the color and flavor out of the best peas ever picked.

It is all in the cooking. Well, no. I am letting my enthusiasm carry me away there. It isn't *all* in the cooking. The vegetables must be fresh and tender to begin with. But when we can go out and pick them from the garden at just the right moment, most of them are. So it comes back to the cooking, after all.

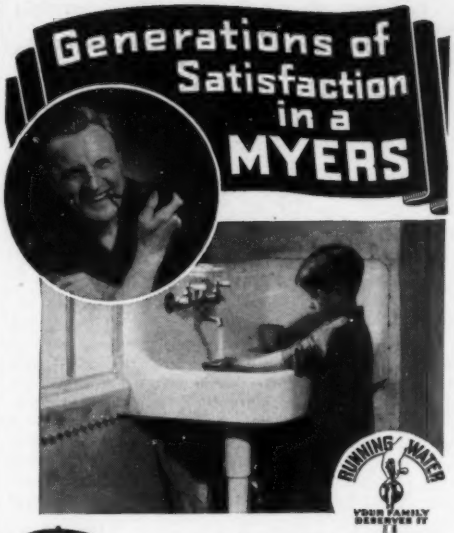
The food specialist interested in saving the food value and enhancing the appeal of vegetables says to cook them in as little water as possible.

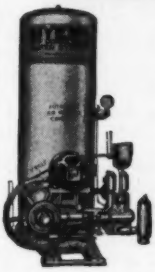
Now this is very easy to do when you cook with electricity because you have your heat definitely under control. It is supplied to you in measured lots, plenty to bring your vegetables to a boil quickly, then a lesser amount to keep them there.

You put the vegetables in the kettle, add half a cup of water, cover them tight, and turn the current on High. You leave it there until the steam comes out under the cover. With some stoves, you then turn the current to Low for ten minutes and off the rest of the time. With others you can turn it off entirely and the heat stored in the burner will keep the kettle on the boil till the vegetables are done.

That is another point in vegetable cookery. They should be cooked just long enough to make them tender. This will be from 20 to 30 minutes for green vegetables. Old vegetables and winter vegetables need from 30 to 45 minutes. You want

Just a half cup.





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to time them, for the cover should stay on tight when you are cooking with stored heat.

Just one more trick with vegetables good cooks have picked up somewhere or other. For each serving add half a tablespoon of salad oil when they are about half done. It improves their looks and taste.

• • •

Cooling Off

THERE are ways of cooling off whatever the thermometer says. Some are easier than others. It may be that you can drive into town to a movie where the sign "Air-Conditioned" is larger than the one with the star's name and sit for a time in blissful cold. Some of the family may go in swimming; others just go for a ride. But this makes just a short break in the heat wave. All of you have to come back home. So if you are really interested in summer comfort, you have to take steps to get it right there.

There are two simple ways to do this. One is to keep the sun out of the house with drawn shades, with awnings, or with the vines you planted last spring. The other is to set up a little breeze that cools you off whenever it strikes you.

You can do this with an electric fan. A fan in the living room or out on the front porch will keep up a steady little breeze as long as you like.

A fan in the kitchen blows out the smell of cooking food, stirs up lagging appetites and soothes ragged tempers. A fan in the bedroom helps bring a night's sleep.

The new fans are much quieter than fans used to be. Some of them are made with blades of composition metal, of rubber, or of tape. They can be set on the table, hung from the wall, or perched on a pedestal that makes them quite independent of the furniture in the room,—and can be moved about like a bridge lamp. I have heard of one that can be hung on the head of the bed, but I've not tracked that one down yet.

Fan manufacturers urge us, when we buy fans, to get one big enough for the rooms we sit in. They make them in different sizes for different needs, of course. A good sales person will be trained to help you select just the right fan for your home.

• • •

August Contest

MRS. W. E. BROADHEAD, of Alabama, writes the prize winning letter this month. She could tell us a different story about her home to-day.

Next month is a time for all good cooks to come to the aid of the party. The letter will be on "My Best Frosting." Ingredients, method,—by all means, method—and history if it has one.

If we print yours, we will send you a check for five dollars. All of the letters become the property of the magazine, and the writers agree to their use, or to the use of quotations from them at regular space rates.

Send in your letters by August 20, please. The address is Gail Meredith, 1026 Seminole Highway, Madison, Wisconsin.

WHEN I WAS MARRIED

(Prize winning letter for May)

When I married 34 years ago, I went to keeping house in a little two-room shack. For my bedroom I had two bedsteads, a feather bed, a straw mattress for each stead, four pillows, four sheets, six quilts, four hand towels, two trunks, six chairs. I made a dressing table from an orange crate, draped it with flour sack curtains, placed a small mirror on the wall above it. This table held my toilet articles, which consisted of a comb and brush, a box of face powder. My window curtains were made of flour sacks.

My kitchen and dining room were the same, and contained a small stove. Cooking utensils were iron and tin, and consisted of 1 kettle, 1 pot, 2 bakers, 1 skillet, 2 pans, 1 dish pan, 1 coffee pot, a coffee grinder, 1 sieve, 1 zinc water bucket, a tin dipper and wash pan. Two home made pine tables, one I used as a dining table, the other for a cook table. My dishes consisted of a set of six plates, cups, saucers and water glasses, 1 platter, 2 vegetable bowls, six knives, forks and spoons (tin), one lamp, one oil table cloth.

I made a cabinet of an orange crate and used flour sacks for curtains for my cabinet. I used this cabinet in which I stored my dishes.

MRS. W. E. BROADHEAD,
Route 1, Calera, Ala.

Measuring

Young Brown got a job in a shipyard. The first morning the foreman gave him a two-foot rule and told him to go and measure a large steel plate. Brown returned in twenty minutes.

"Well," inquired the foreman, "what's the size?"

The youth displayed a satisfied grin.

"It's just the length of this rule," he said, "and two thumbs over, with this brick, and the breadth of my hand, and my arm from here to there, bar the finger nails."

—*Log.*

The Rub

Here's to the chigger,
That grows no bigger
Than the point of a pin.
But the lump he raises
Itches like blazes,
And that's where the rub comes in.

We always called a spade a spade until we hit our foot with one the other day. —Sundial.

Air Conditioning for Equatorial Cows

COWS in hot and humid Singapore located just off the equator south of China, will soon be living in a barn cooled by air conditioning, as the result of a move by Malayan dairymen to reduce the adverse effect of climatic conditions on milk production.

This step is in line with experiments conducted by agricultural departments of various states, including California, Georgia, Wisconsin and Missouri in cooperation with the U. S. Department of Agriculture.

The U. S. Department, for instance, conducted experiments in Wisconsin recently which showed cows were most comfortable at a temperature of 50 to 55 degrees Fahrenheit. Temperatures in Singapore and vicinity average above 80 degrees the year around, according to the U. S. Weather Bureau. Peak temperatures frequently touch 100 and above. Humidity soars in the moist climate, adding to discomfort.

Dairy experts have noted that cows imported from the United States and Australia have had a premature reduction in milk production when introduced to the terrific heat of the Singapore Straits Settlement.

To meet this situation, dairymen from the Singapore Dairy Farm, largest in the settlement, recently ordered a 15-ton air conditioning system. This system is capable of producing daily as much cooling as created by the melting of 15 tons of ice.

In commenting on experiments conducted to increase milk production, E. J. Perry, extension dairyman of the New Jersey State College of Agriculture, said:

"A review of experiments showed that a decided reduction in yield of milk results when cows are kept in an air temperature above 85 degrees Fahrenheit for more than 48 hours without the cooling effect of a breeze."

He said, however, no data has been collected on the use of air conditioning to increase milk production. Dairymen will watch the Singapore experiment with interest.

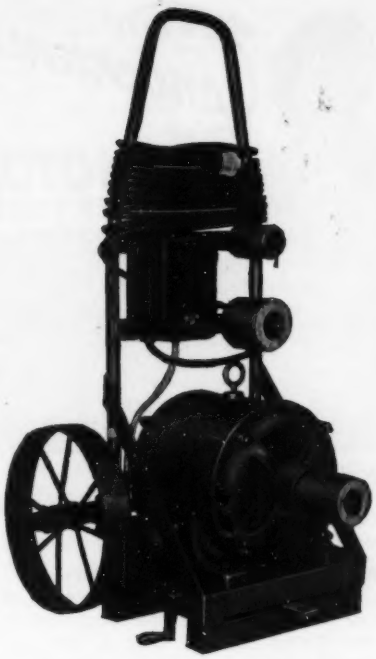
Experts at the Singapore farm soon found that cows exposed to terrific heat gradually dropped off in milk production. Air conditioning was decided upon in lieu of various other methods heretofore used to keep cows contented. The system in the Singapore barn will cool the air by reduction of humidity, which more primitive systems cannot accomplish.

Of the United States Department of Agriculture's Wisconsin experiments which showed that cows were most comfortable at a temperature of 50 to 55 degrees Fahrenheit, Mr. Perry said:

"At this, and lower temperatures, the cows were more alert, their appetites were better, their eyes were brighter and their hair more glossy than at the higher temperatures."

While a quantity of fresh milk is available in Singapore at all times, many families are forced to use a substitute composed of skim milk powder, butter and water. If the Singapore Farm experiment is successful, it is hoped to place a larger supply of fresh, rich, creamy milk on the market.

If you want to recall things, tie a string around your finger. If you want to forget things, tie a rope around your neck. —Sundial.



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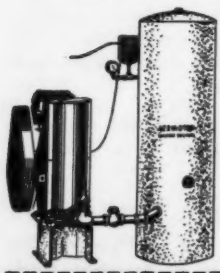

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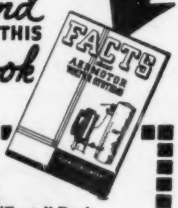


AERMOTOR COMPANY,
2500 Roosevelt Road,
Chicago, Illinois

I am interested in buying an **Aermotor Water System.** Send "Facts" Book.

Name .....

Address .....

Town ..... State .....

What Does Electric Current Cost?

The following table gives the current consumption for various farm appliances. To get the cost in dollars and cents it is only necessary to multiply the figures given in kilowatt-hours by the local rate for electric current. These figures were compiled and recently published by the General Electric Company of Schenectady, N. Y.

All consumption figures are "average" and may, in some cases, be slightly higher or lower, depending on operating conditions.

In the Home	Kilowatt-Hours Per Month
Dishwasher	2¼
Fan	1 for each 8 to 10 hours of operation
Iron	4 (1 per person)
Ironing machine	8-10
Lighting	25 (including small household appliances)
Oil furnace (electric control)	200 to 500 per year
Radio	
All-electric	3½ to 12 (average 8)
Battery chargers	3½ to 5
Range	128 (1 per person per day)
Refrigerator	20 to 40
Sewing machine	1 or less
Telechron clock	2
Vacuum cleaner	3 per year
Washing machine	2 (½ per person)
Water heater	150 to 600 (average 340)
Water supply	
Shallow well	4½
Cistern	1½

On the Farm	
Brooding	½ per 6 weeks per chick
Churning	1 per 100 lb. of butter
Corn husking and shredding	5 per ton
Corn shelling 1 to 5 hp)	1 per 5 bushels
Cream separating	½ per 1,000 lb. of milk
Sterilizing dairy utensils (10 to 40 cows)	3½ to 7½ per day
Dairy water heating	15 to 35 per 100 gallons
Farm-chore motors (3, 5, 7½ hp)	3, 5, 7½ per hour of operation
Farm shop	½ to 3 per month
Feed grinding (3, 5, 7½ hp)	1/10 to 3 per 100 lb.
Fractional-horsepower motors	1 for each 1 to 5 hours of operation
Fruit grading	½ to 1½ per 100 bushels
Grain cleaning	⅞ to 1¾ per 100 bushels
Grain elevating (5 hp)	1 1-/10 to 5 per 1,000 bushels
Hay baling (5 hp)	2 to 4 per ton
Hay hoisting (5 hp)	1 per 3 tons
Incubating (small)	150 to 300 per 1,000 eggs hatched
Irrigating (surface)	2 to 4 per acre-foot per foot lift
Lighting entire farm	25 to 30 per month
Milk cooling	25 to 30 per month per 10 gal. per day
Milking	
Portable type	1½ per cow per month
Pipe-line type	2 to 3 per cow per month
Paint spraying	1 per 250 square feet
Seed-corn testing	2 per bushel tested
Sheep shearing	1½ per 100 sheep
Silo filling	1 to 1½ per ton
Soil heating (hot beds)	½ to 1½ per day per sash (3 x 6')
Soil sterilizing	1 to 1½ per cubic foot
Threshing (10 hp)	½ per 100 lb. of grain
Ultraviolet for dairy cattle (S-1)	25 to 35 per year per cow
Ultraviolet for laying hens (S-1)	½ to 1 per year per bird
Ultraviolet for baby chicks (CX)	¼ to ½ per brood per chick
Water supply (all farm uses)	20 to 30 per month
Wood sawing (5 to 7½ hp)	1 to 2½ per cord

Plant Development Accurately Controlled

"Greenhouse and hotbed operators are now able to hit the high-priced market with assurance," George Rietz, G. E. Rural Electrification specialist, said in a recent talk at a meeting of the New Jersey branch of the National Association of Gardeners.

"By the use of electric soil heating and sterilizing equipment, the grower is able to maintain an ideal growing temperature for young plants and provide a seed bed free of such plant enemies as disease, weeds, insects and fungi," said Mr. Rietz.

"The operator has direct control of the rate of plant growth in electric soil-heated beds. Any minimum temperature from just above freezing to 80 or 90 degrees Fahrenheit can be selected and maintained. The growing period is greatly shortened and a higher percentage of germination and more uniform and more vigorous plants result.

"Electric soil heating equipment is very simple and flexible, consisting of only soil heating cable and a temperature control thermostat. With this equipment it is possible to speed up or retard plant growth by the periodic adjustment of soil temperature, thus guaranteeing full production when most wanted and most valuable."

Explaining the operation of soil sterilization equipment, Mr. Rietz said, "The soil is brought up to necessary temperature to assure killing of any enemies present. Some operators feel that from 145 to 180 degrees will satisfactorily remove all deterents to healthy plant growth, although others sometimes raise the temperature as high as 212 degrees. After the power is turned off, the soil is left in the sterilizer for about 30 minutes and often stored for from 10 days to two weeks before planting to be sure that any harmful fumes or compounds have leached out."

Mr. Rietz touched on the use of artificial light as a third means growers now have to grow plants with greater certainty and profit. In some areas practically every florist is now using lights over certain flowers to bring them into full bloom at just the proper time.

"The special equipment now available for soil heating, soil sterilizing, and artificial illumination has resulted in the broad and rapid adoption of these modern growing methods," said Mr. Rietz.

A 3500-Mile Milk Route

A 3,500-mile milk route, believed to be the world's longest, has been established with the aid of modern refrigeration on a group of Pacific islands serviced by the China Clipper and other clipper ships of the Pan-American Airways.

Specially devised refrigeration machines were sent to the former barren isles of Midway, Wake and Guam for storage of milk and other dairy products shipped by plane from Honolulu.

The Dairymen's Association, Limited, of Honolulu, has completed arrangements to serve the three islands with regular deliveries of fresh milk by means of the clipper ships of the air line. Air line and government employees on the islands heretofore were forced to use powdered milk.

The distance is approximately 3,300 miles in a straight line from Honolulu to Guam and about 200 more on the regular air route.

ESCO NI-AG-RA *the only* MILK COOLER

THAT AUTOMATICALLY COVERS THE DANGER AREA!

Whether only one can, half capacity, or both milkings are in place

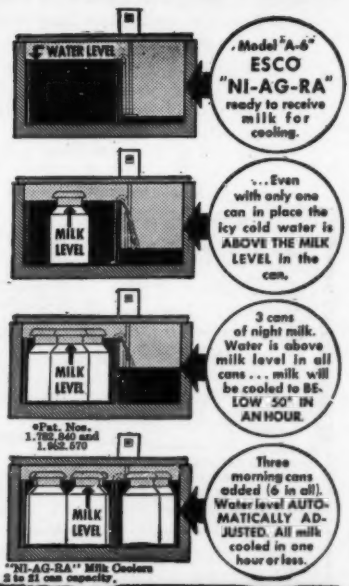
The top layers of milk and cream are the danger area of high bacteria concentration and growth. The milk at the top, as well as the lower part of the can, must be properly cooled to below 50 degrees and kept cold—to keep bacteria counts down.

LOOK AT THESE PICTURES

See how the ESCO "NI-AG-RA" always keeps icy cold water up on the neck of every can—so that all the milk to the very top is properly cooled.

The EXCLUSIVE PATENTED NECK-HIGH WATER LEVELER does this automatically—no valves to turn—no dummy cans—works just like a waterfall.

The ESCO "NI-AG-RA" gives you Faster, Better Cooling —at lower cost.


WATER LEVEL
"Model A-6" ESCO "NI-AG-RA" ready to receive milk for cooling.
MILK LEVEL
...Even with only one can in place the icy cold water is ABOVE THE MILK LEVEL in the can.
MILK LEVEL
3 cans of night milk. Water is above milk level in all cans ... milk will be cooled to BELOW 50° IN AN HOUR.
MILK LEVEL
Three morning cans added (6 in all). Water level AUTOMATICALLY ADJUSTED. All milk cooled in one hour or less.
*Pat. Nos. 1,782,840 and 1,862,870
"NI-AG-RA" Milk Coolers 2 to 21 can capacity.

Descriptive literature gladly sent upon request. Write or send postal today!

ESCO

ESCO CABINET CO. 641 E. Biddle St. West Chester, Pa.

DELCO PUMPS

Earn their keep— and more

Running water adds to farm profit as well as comfort and conveniences. It saves time — and makes money!

● A Delco automatic water supply keeps water always on tap . . . ready for every job. For watering stock — a few cents will pay for pumping water for twenty head of cattle. For protection against fire loss, for sanitation, there is no sounder investment. These advantages quickly count up to actual big cash savings! And that means more profit! There are Delco Pumps for every requirement — up to hundreds of gallons capacity per hour. Give a Delco Pump a chance to show you how it can earn its keep—and more! Mail the coupon below for full details!

EASY FINANCE TERMS

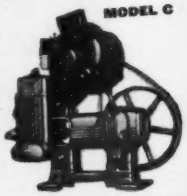
Ask your Delco Pump dealer to explain how easy it is to buy and pay for a new watering system.

A NEW DELCO PUMP

Capacity 225 gallons per hour. Automatic. Operating pressure 20-40 lbs. For lake, well or cistern where lift does not exceed 22 ft. Available in either 32 volt or 110 volt.

(110 volt A. C.) $49.00

Also Delco deep well pumps available for depths exceeding 22 ft.



UNITED MOTORS SERVICE Inc. EP-5
General Motors Building, Detroit, Michigan
My well is_____feet deep. Please send complete information on Delco Pumps.
Name_____
Address_____
Town_____ State_____

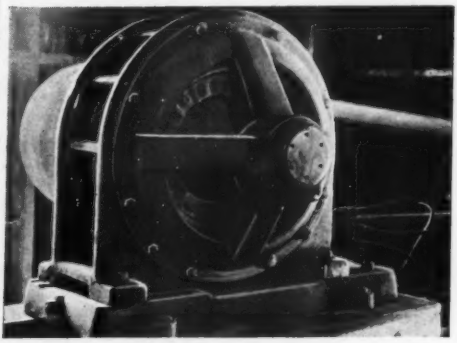
PRODUCT OF GENERAL MOTORS

When ELECTRICITY TURNED FARMER in California

By C. W. GEIGER

IN a prune orchard owned by William W. and Nathan L. Lester, five miles west of San Jose, California, is a 25-year-old, 50 horsepower electric motor that played an important part in the modernization of fruit-growing and farming methods in the Santa Clara Valley. It led the way in the elimination of costly and bothersome steam driven irrigation plants and the adoption of electricity not only for pumping but for dozens of other purposes. Incidentally, it's still in regular use. What's more, it hasn't required any repairs or maintenance work.

Installation of the motor, in 1910, marked the inauguration by the Pacific Gas and Electric Company of rural electrification in that section of California. To run it the Power company built from San Jose the first agricultural service power line in the valley. From that beginning has grown a vast network which crisscrosses the whole area, making electric conveniences as easily available on farms as in cities.



Twenty-five year old motor that led the way in elimination of steam pumping plant from the Lester farm in the Santa Clara Valley, Calif.

This historic motor replaced a 100-horsepwer steam engine in the operation of a large pump. It proved its great superiority from the start. It was much smaller, more economical, more efficient and infinitely more convenient than the old plant. It needed no watching, whereas its predecessor demanded the constant attention of an engineer. Besides, the change banished the problem of trucking and string fuel.

As soon as possible the Lesters substituted a motor for an engine in another orchard they owned near Campbell and put in a third on a tract in Willow Glen. Meanwhile the original installation was attracting fruit-growers and ranch-

ers from all over the countryside. As a result, steam plants were discarded as rapidly as service extensions could be built. And before long the Valley was completely electrified.

The Lesters have seen many improvements in the Santa Clara Valley, for they have been growing prunes there for 35 years. They began with 100 acres and by 1914 had 1000 acres under cultivation. Later, however, the cut their holdings to 400 acres. Of all the improvements, they consider electrification by far the most important. And they know, because they now use three 50-horsepower and two 30-horsepower pumping motors and much other electrical equipment. In William Lester's words: "Electricity is better all around for any job."

Poultry Profits

(*Continued from page* 17)

specially mixed feeds. About 15 min. a day is required for mixing during the brooding season.

For the last few years, the three large Palmer poultry houses have been well lighted all night long winter and summer. This is a successful inducement for the chickens to eat and lay more.

Automatic drinking fountains are made possible by electric motor-driven pumps and pressure tanks. Having fresh water constantly before them, the chickens are induced to drink more. Egg production is increased and pullets show rapid gains in weight and development.

Electricity is used effectively in many other ways on the Palmer farm. One deep well pump, driven by a ½ HP. motor, and two shallow well ¼ HP. pumps supply the house and farm buildings with running water. Another ¼ HP. portable motor is found convenient for running an emery wheel and a small drill press.

Finding electricity a valuable hired man, the Palmer brothers have now turned to electrifying their house. They are proud of an electric range added last August.

"We would not want to operate a farm without the aids electricity can bring" is the enthusiastic comment of these two Ohio farmers.

Commercialized

I was taking tea with a great city editor last Sunday afternoon when his little daughter came back from Sunday school with an illustrated card in her hand.

"What's that you have there, little one?" the editor asked.

"Oh," said the child, "just an ad about heaven."

—Pointer.

"Don't talk to me about lawyers, my dear. I've had so much trouble over the property that I sometimes wish my husband hadn't died!"

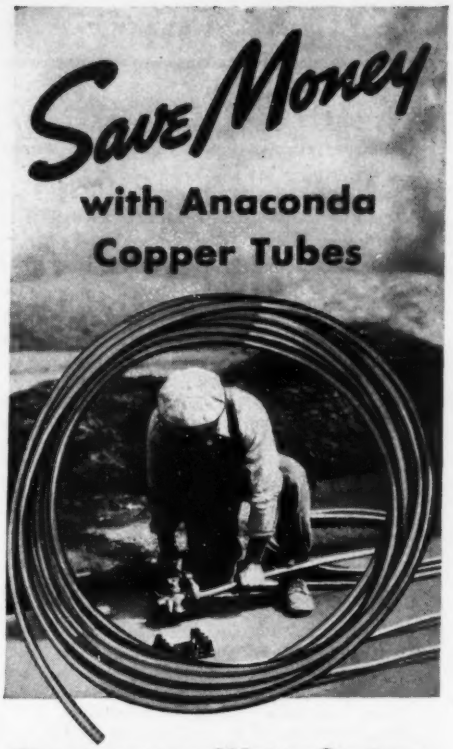
Distrust

A colored member went to his pastor and handed him a letter, which ran: "Please God. send dis poor darkey $50 right away."

The pastor, a kind-hearted man, called together several of his friends and said: "This poor fellow has so much faith that he expects God to send the $50 right away. We shouldn't let him be disappointed. Let's take a collection for him."

This was done and $42 was contributed, which sum was sent to the ingenious petitioner.

The next day the colored man handed the parson another letter. This one ran: "Dear Lord: 'De nex' time Yo' send dis darkey money. don't send it by no parson—send it t' me myself."



For your new Water System They Insure Rust-free Flow

Water companies use millions of feet of copper tubes for a good reason: they last many times longer underground than pipe that rusts. Yet they cost hardly any more. Also, copper tubes are:

- *thinner, lighter, need no threading*
- *less liable to burst if frozen*
- *readily bent, easily installed*

Underground, and in your house and outbuildings, Anaconda Copper Tubes will save you money by forever eliminating rust. Two types: soft for underground and interior plumbing. Hard for interior use only. 3779

Be sure to write for free booklet X-19

ANACONDA

Anaconda Copper Tubes

THE AMERICAN BRASS COMPANY

Gen. Offices: Waterbury, Conn. *Offices and agencies in principal cities*
In Canada: Anaconda American Brass Ltd., New Toronto, Ont.

Free Information About Equipment

Readers—we are glad to help you secure catalogs and descriptive literature on electrical appliances and equipment. It is a FREE service and NO OBLIGATION is involved.

When seeking information about any piece of equipment or material you are planning to buy, first look through the advertisements in this issue. They are your best guide.

Then, if you do not find what you want—use the handy coupon below, listing clearly and exactly the items on which you want further information.

___Animal Clippers
___Bench Saws
___Better Sight Lamps
___Bottle Washers
___Brooders
___Bunch Tyers
___Burglar Alarms
___Churns
___Clocks
___Clothes Washers
___Coffee Makers
___Corn Shellers
___Cream Separators
___Dairy Sterilizers
___Dishwashers
___Drills
___Egg Graders
___Ensilage Cutters
___Feed Grinders
___Feed Mixers
___Flat Irons
___Floodlights
___Food Mixers
___Hay Choppers
___Hay Hoists
___Ice Cream Freezers
___Incubators
___Insect Killers
___Ironing Machines
___Irrigation Equipment
___Light for Plant Growth
___Milk Coolers
___Milking Machines
___Motors
___Paint Sprayers
___Pasteurizers
___Radios
___Ranges
___Range Heating Units
___Refrigerators
___Roasters
___Septic Tanks
___Sewing Machines
___Soil Heating
___Soldering Irons
___Spray Plants
___Tea Kettles
___Toasters
___Threshing Machines
___Time Switches
___Tool Grinders
___Ultraviolet Light
___Vacuum Cleaners
___Vegetable Washers
___Ventilators
___Waffle Irons
___Water Heaters
___Water Softeners
___Water Supply
___Welders
___Woodworkers

FREE INFORMATION COUPON

ELECTRICITY ON THE FARM
Readers' Service Dept., 24 W. 40th St., New York

Without cost to me, please have manufacturers send complete information on the following Electrically Operated Equipment which I am thinking of buying:

.....
.....
.....

My name is.....

Address .....

I get electricity from..... .....

..... 8-37

On the Air

Conducted by JEROME J. HENRY

Covering the Opera Over the Air

EVERYTHING but an actual seat in the Metropolitan Opera's famous golden horse shoe is given to radio listeners each winter and spring over NBC stations. The 1937 season was a particularly brilliant one, and through radio many families in town and country all over the United States have added opera to their long list of radio pleasures.

Special programs give the history, musical form, story, and other details of the operas, then finally, on Saturday afternoons, the presentation of the Saturday matinee is the high spot of the week.

This season listeners heard many world renowned stars, and to assist in the appreciation of the broadcasts, Marcia Davenport, distinguished music authority and author, was at the microphone to interpret the music and explain the story.

• • •

No Control Broadcast Ideal

A situation in which the studio engineer would be enabled to leave his control knob untouched and the listener keep his receiving set adjusted to the finest point of reception should be the ideal of the composer writing serious music for radio, according to Walter Piston, of Harvard University's music division.

The composer whose music is broadcast, he pointed out, is dependent upon the listener tuning in, on the kind of set he has, and on the discriminating power of his ear.

The average radio is improperly placed and the seating arrangement about it generally faulty. In addition the volume is often not turned up high

Lule Belle of the National Barn Dance Program. She was chosen as 1936 Radio Queen of the United States by popular vote.

enough. The power of the listener to make adjustments on the music being broadcast is the most serious feature of composing for radio.

Piston noted also that music designed to impose the least burden on the control engineer is the most closely suited to radio. No control, both from the composer's standpoint and the engineer's, would be ideal.

• • •

New Series Based on Advice to Lovelorn

SHOULD a young girl marry an older man with money in order to help her family? What can be done to save the girl who comes to the city and is tricked into following a dubious career?

These are some of the problems being dramatized on the "Big Sister" series over a nation-wide network Mondays through Fridays each week.

Lilian Lauferty, who writes the sketches, is drawing on the problems she considered when writing "Beatrice Fairfax" and "When a Girl Marries" columns for seven years before turning to radio.

Miss Lauferty, in explaining the philosophy of "Big Sister," said, "It is based on Robert Louis Stevenson's verse, 'There is so much good in the worst of us, and so much bad in the best of us, that it ill becomes any of us to talk about the rest of us.'"

Ruth Evans, as "Big Sister," is the kind friend we all wish we had. She is the ideal confidante who never laughs at the wrong time nor preaches instead of doing something to help.

Even when enemies trick Ruth into visiting a tawdry dance hall—"Big Sister" turns the adventure into an act of kindness for an unhappy girl she finds working in the establishment.

• • •

Cop Softens At a Song

MOST amusing experience of Zarova's singing career was when the pretty young soprano, heard Sunday from coast to coast, almost got arrested merely because she was singing.

The occasion was a party of musicians, where Zarova, thrilled by the fact that she was singing in an enormous studio, let her operatically trained voice out to full volume in "Dark Eyes." Suddenly the bell rang and a police officer appeared demanding to know, "Who's in trouble?"

The exciting Russian folk song had a suspicious sound to his ears until Zarova sang another song for him, this time in drawing room volume. He applauded lustily and gallantly apologized, "Lady, you sing like an angel. Anybody that would complain of such singing would want to shoot a mocking bird for singing his love song to his mate."

• • •

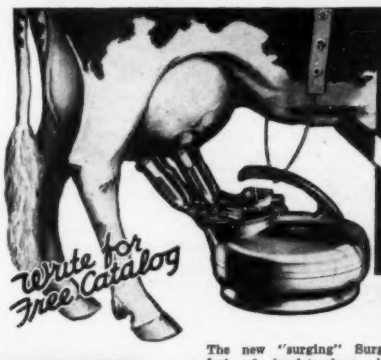
Best Dressed Hair in Radio

THE best dressed hair in radio is being credited by many persons to Margaret Speaks, prima donna of the Voice of Firestone concerts. Certainly the blonde soprano's coiffure is most unusual.

The style was created exclusively for Miss Speaks. To accentuate her smooth ivory white

THE ONLY *Adjustable* MILKER!

THE ONLY *Variable Pull* MILKER!



The NEW 1937 Surge MILKER

Milks Quicker! Cleaner! Cheaper!

Write For "20 MONTHS TO PAY" EASY TERMS OFFER!

The new "surging" Surge Milker replaces 4 feet of hard-to-clean, hard-to-sterilize milk tubes with 4 short inches! No claws. The one milker instantly adjustable to each individual cow: An easy pull for some cows—a heavier pull for other cows—A variable pull for all cows. Surge is the first and only milker to bring you solid 18-8 Stainless Steel construction in every metal part touching milk—guaranteeing no retinning, no corrosion, lower bacteria count, greater strength, lifetime durability, perfect sanitation. The sanitary Surge is milking Champions of all breeds! Certified and grade "A" producers are using this new "Surging" Surge Method—proven by 12 years of unparalleled success—because it is the best and does the job quicker, cleaner, cheaper. Less stripping! You can buy a new Surge Milker for a small amount upon installation and easy payments for 20 months. (The new Green Surge inflation with reinforced tubes, a patented feature, gives double life, cuts your cost in half.) Write for FREE Surge story in book form, Easy Terms Offer, Hurry!

BABSON BROS. CO.

2843 W. 19th St., Dept. C-551.....Chicago, Ill.
566 Spencer St., Dept. C-551.....Syracuse, N. Y.
740 N. Washington Ave., Dept. C-551, Minneapolis, Minn.
1518 First Ave., S., Dept C-551.....Seattle, Wash.

Now Only $77.50 For The

★ BURKS-AUTOMATIC ★

Self Priming WATER SYSTEM Complete

WORLD'S FINEST WATER SYSTEM

with "ONLY ONE MOVING PART"

NO Gears Leathers Pistons Pulleys Chains Cranks Valves Liners Belts

360 Gallons Per Hour

TWO MODELS With 9 & 20 Gal. Storage Tank

360—500 Gallons Per Hour

Fig. 3336-9

Select your next Water System on Performance Record

√ The BURKS—Lifts Water 28 Feet
√ Lowest Maintenance Cost
√ Largest Hourly Pumping Capacity

"You Can't Go Wrong On A Burks"

The New Burks Auto-Built Deep Well Pump Is Recommended For Depths Below 28 Feet

DECATUR PUMP COMPANY DECATUR ILLINOIS

BLIZZARD OPERATES EASILY, ECONOMICALLY, EFFICIENTLY WITH 5 H.P. ELECTRIC MOTOR!

The Blizzard Ensilage Cutter and Hay Chopper operates with ease and amazing satisfaction with electric power. At Michigan State College 4 silos were filled with a total of 188 tons of ensilage at a total power cost of $5.34 using only a 5 h.p. motor.

Many farmers have found that the Blizzard and electric power make an ideal, profitable combination. Get free catalog at your dealer's or write us direct.

BLIZZARD MFG. COMPANY BOX E, CANTON, OHIO

BAKER POWER PUMP WATER SYSTEM

Gives running water under pressure from any depth well. Various size pumps and capacities—superior design—completely automatic—running in oil—quiet and efficient. Warranted by our half century pump manufacturing experience. Attractive low prices.

RED FRED PUMP JACKS

Famous "Red Fred" Jacks. Quiet—easy running—fully enclosed—machine cut pinion and gears packed in grease. Leverage advantage on up stroke allows use of smaller H.P. Motor. Complete assembled Outfits or Jack units only.

FREE *Literature and Engineering Service*

THE HELLER ALLER CO. NAPOLEON OHIO

forehead, the hair is brushed upward in a modern version of the Gibson Girl pompadour. Then, although her hair is waist length, it is arranged to look like a ringlet bob in front.

This combination of contemporary curls and a classic knot is particularly appropriate for the willowy young singer since the music program in which she sings is being modernized to include popular songs.

Miss Speaks follows the new tradition of radio —evening dress for evening broadcasts. Her gowns are usually of rich colored satins or brocades during the winter months, gay silk prints or pastel chiffons during the summer. Being tall and slender she is able to wear simple "streamlined" styles that are particularly effective on the studio stage.

Mercedes McCambridge, pretty youthful radio dramatist.

Safety

"Your Honor."

"Yes, my man."

"As you know, No. 381354-B is to be hanged this morning."

"You are right."

"But he wishes it postponed, your honor."

"And what are his reasons, my man?"

"Well, he has a boil on his neck, and he fears the rope may open it and cause infection. He even intimates, your honor, that it might prove fatal."

"We're going to have a swell time tonight. I've got three seats for the theatre."

"Why do we need three seats?"

"They're for your father, mother and kid brother."

Off the Record

Another fellow who lives off the fat of the land is the girdle manufacturer. —Awgwan.

The summer boarder asked: "Why is it that old hog keeps trying to come into my room? Do you think he has taken a fancy to me?"

Little Willie explained it. "Why, that's his room during the winter."

Questions and Answers

Conducted by R. U. BLASINGAME

Horsepower of Motors

Question: *Will you kindly advise the horsepower output of the average vacuum cleaner motor. For instance, what is the h.p. of a motor marked "250 watts at 110 volts," taking into consideration the efficiency of the motor?*

Also, what is the probable rating of a washing machine motor marked "4.2 amp. 110 V, 1750 r.p.m.?

R. M. R.

Answer: The manufacturers of the motors to which you refer can supply you with accurate data on the horsepower and other characteristics of these motors, and I advise you to write to them for this information.

The efficiencies of small motors vary and become higher as the size of the motor is increased. A motor marked "250 watts at 110 volts" will probably have an output of about 1/6 horsepower. The rating of the motor marked "4.2 amp., 110 v., 1750 R.P.M." is probably ¼ horsepower.

Electric Fence Controllers

Question: *Several people in this vicinity have installed a very simple type of electric controller for fencing. The electricity passes first through a 5 amp. fuse, then through a 7½ watt bulb and then another 5 amp. fuse. This means of course that there is 110-120 V. on the fence and the bulb and fuse are the only controllers. Would this type be considered safe in regard to personal, livestock and property damage? Some of these types have lightning arresters.*

N. D.

Answer: The electric fence controller which you described is not considered safe. The use of a 7½ watt lamp without an additional device, such as a resistance, will not limit the current flow to a safe amount. A 5-ampere fuse will serve only to protect the wiring system. Also, when alternating current is used on the fence, an interrupter should be employed to prevent a continuous flow of current in the fence.

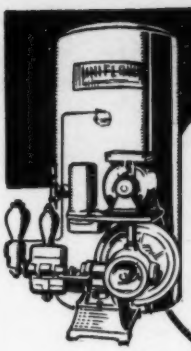
In no case should a fence be connected directly to a lighting circuit. To connect the fence in series with a 7½ watt bulb does not make the fence safe. Also, with this type of controller no method is provided for changing the voltage to suit dry or wet conditions.

220 Volt Circuits

Question: *I have a 100 acre electrified farm here and have all sorts of machines operated by electric power. A new question has just arisen. Now that 220 volt bulbs are available, why not run but two wires to the barns, thus running both motors and lights at 220 volts? I have tried it and it works all right.*

However, the inspector did not approve of it, but the insurance companies say they have no objection. Recently I put a ½ h.p. motor in to replace a gas engine. Motor had a belt which ran

(*Continued on page 34*)



WATER SYSTEMS

Uniflow SHALLOW WELL

Shallow Well Pumps from $48.00 up
Shallow Well Systems from $55.00 up
Deep Well Pumps from $89.00 up
Deep Well Systems from $104 up
Models from 250 gal. to 5000 gals. per hour.

Uniflow, one of the first to build electric pumps, takes advantage of one-way water travel which is responsible for a 20 to 30% saving in power . . . and for quiet operation. A Patented Water Box, with suction valves below and discharge valves above make one-way water travel possible. Write for the complete Uniflow story.

WATER SYSTEMS — RUNNING WATER — WATER SOFTENERS

ELECTRIC REFRIGERATORS

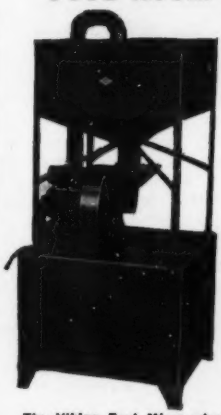
UNIFLOW MFG. CO
1503 EAST LAKE ROAD
ERIE PENNSYLVANIA

MILK COOLERS

Every Farmer His Own Feed Room Operator When He Owns

VIKING

Feed Room Equipment



Operating from fractional horse power motors any farmer can save . . . time . . . labor . . . money with—Viking Hammer Mill — Viking Corn Sheller — Viking Feed Mixer.

With a Viking Hammer Mill you can grind your own feed, at low cost, when and as you want it. Using less than one kilowatt hour per hour, the mill can be plugged into any convenient 110-volt outlet and will grind up to 700 pounds of feed per hour while you go on with other work.

Corn can be dumped into the hopper of the corn sheller and your Viking will sort the ears and feed them automatically. It shells large ears and nubbins equally well and a vibrating screen and blower cleans it thoroughly. Has all-steel electrically welded frame and is equipped with a seed corn tipper.

The Viking Feed Mixer mixes all grains, seed, mashes and concentrates, about one ton of feed per hour, and does an excellent job on inoculation. Has patented kneading action that prevents oil mixtures from working into balls or lumps.

Write for complete information and literature.

Viking Manufacturing Co.

Jackson, Michigan, U. S. A.

What's New

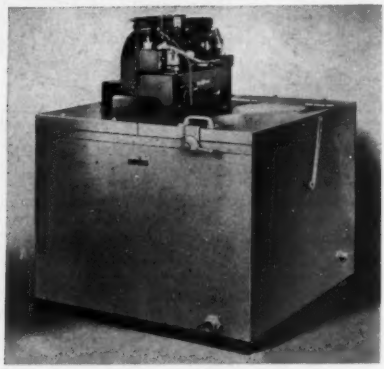
Reviewed by T. E. HIENTON

Names and addresses of manufacturers of the articles described in this column will gladly be furnished upon request. Address your requests to What's New Department, ELECTRICITY ON THE FARM, *24 West 40th Street, New York, N. Y.*

Electric Milk Cooler

Milk must be cooled within two hours after it is drawn from the cow to prevent an increase in the number of bacteria and deterioration in quality. Health boards of cities and states generally require that milk be cooled on the farm where it is produced. Cooling milk is efficiently and economically done by electrically driven refrigeration machines when units of sufficient capacities are properly installed.

An electric milk cooler has been added to the line of refrigeration equipment produced by a well known manufacturer. This new unit includes a number of milk and cream coolers in wet or dry storage models in various sizes, which may be equipped with ice maker. These coolers include all-steel cabinets with all-steel outer tank and all-

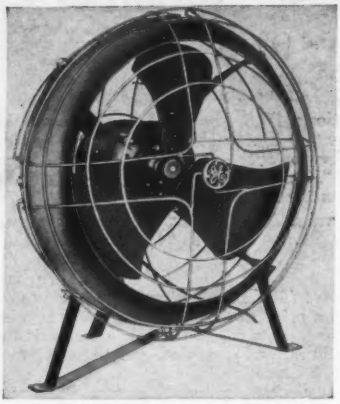


steel inner tank. Refrigerating units are mounted on the tops of the cabinets. Wet storage models are available in 2, 4, 6, 8, 10, 12, 14, 16, 18, and 20 ten-gallon can sizes and dry storage in sizes to hold 148, 144, 240, or 288 quart bottles in crates.

Ventilating Fan

A trip to the attic on a warm summer day means a trip to one of the warmest spots on the farm. The air in the attic has little chance to circulate and is heated through the roof by the sun. This blanket of hot air in the attic makes the rooms below warmer unless the air is exhausted by means of a fan.

A manufacturer of a large line of electric equipment has announced the development of a fan for the purpose of circulating air in houses. During the day it may be used to exhaust the air from the attic through an open window by shutting off the attic from the rest of the house. At night, the rooms in the house may be made more comfortable by opening the door into the attic, and raising the windows on the lower floors allowing the fan to draw the cooler night air through them. The fan,



which is not a refrigerating device, has adequate circulation for an average 8- to 10-room house according to the manufacturer and will use about as much electric energy as two ordinary light bulbs.

Questions and Answers

(*Continued from page 33*)

on the brake drum of an old car front wheel, while the hub made the pulley for the flat belt originally on pump jack. *W. B. B.*

Answer: The use of 220-volt lamps for ordinary lighting is not recommended because of their higher cost and lower efficiency as compared to 110-volt lamps of the sizes commonly used. Where the load is largely a 220-volt motor load, there are cases when 220-volt lamps are used because of the simplicity of the method. However, there are many appliances for use in the barn which are made for only 110-volt current. Without one or more 110-volt circuits in your barn the uses which you could make of the electrical energy would be limited.

Your inspector probably has other reasons for not approving the use of 220-volts for lights and very likely he will be glad to explain them to you.

CLASSIFIED ADVERTISING

LYON FLY ELECTROCUTORS KILL disease-carrying pests the easiest way. Thousands of flies killed daily at a cost of a cent or two. Cheaper than spraying. Built for long service. Fireproof and water-proof. Send for FREE catalog describing money-saving brooders, alarms, electric material for homemade equipment LYON ELECTRIC CO., Dept. E. F., San Diego, Calif.

COBURN ELECTRIC MILK AND CREAMER COOLERS $19.50 complete. Satisfaction guaranteed. 30 days trial. Cools rapidly at little expense. Saves costly cooling equipment. No installation, wiring or piping cost Agents wanted everywhere. Write for free folder. COBURN CO., B-311, Whitewater, Wis.

SAFE, SANITARY ELECTRIC LAMP KILLS INSECTS AUTOMATICALLY without bait or cost where light is needed. Amazing results in garden, farm, lawn, business house, home, etc. Lifetime service. Price, $2.00 up. Literature free. SAUER BROS., MFRS., 14820-M Foothill Blvd., Oakland, Calif.

COVER TITLE CONTEST

JUNE COVER

RULES
For August Issue Contest

Seven cash prizes will be awarded for the best titles to the picture on the front cover of this magazine.

The first prize will be $20 cash; the second prize $5.

In addition five consolation prizes of $3 each will be awarded for the best title from each of these five geographic sections of the country. 1—New England, 2—Middle and South Atlantic States, 3—East Central (Ohio, Ind., Ill., Mich., Wis., Ky., Ala., Tenn., Miss.) 4—West Central (Minn., Ia., Mo., N. D., S. D., Neb., Kans., Ark., La., Okla., Tex.). 5—Mountain and Pacific (Other far western states).

In case of a tie, each winning contestant will receive the full cash prize to which he or she is entitled.

Titles should be brief—the shorter the better.

All members of the farm family to whom this magazine was sent may submit titles, but each contestant may submit only one title.

Question "A" must be answered.

Entries must be sent to the Title Editor, ELECTRICITY ON THE FARM, 6 North Michigan Avenue, Chicago, Illinois, before September 1st.

Winning names and titles will be announced in the October issue.

Send your title on the coupon or make out a similar form on a plain sheet of paper or government postcard.

Awards for June Contest

First Prize — $20

"No clock to watch, nor fire to tend,

The electric oven is mother's best friend."

MRS. STANLEY G. BEALES, R.F.D. 4, Albion, N. Y.

Nine Sectional Prizes—$2.00 Each

"Set the time upon the top
And I'll be seeing you at twelve o'clock."
EDNA BROOKS, Sleepy Hollow Farm, Sunapee, N. H.

"A combination hard to beat—
Old fashioned charm and electric heat."
MRS. ALTON D. CASE, R.F.D. 1, Cuba, N. Y.

"A dish of perfection plus!
Without so much heat and a lot of fuss."
JUNE ADAMS, R.F.D. 1, Lost Creek, West Va.

"The wood box is gone, the coal bucket too,
I turn the switch; here's a dinner for you."
MARY ETHEL THURSTON, R.F.D. 2, Summitville, Ind.

"Deliciously baked meals while you're away—
'Tis the electric method today."
MRS. M. C. MAYO, Fruitland Park, Miss.

"A wise buyer buys fire by wire,
And ends the strife of a wife, for life."
JOHN A. STARK, R.F.D. 5, Box 47, West Duluth, Minn.

"With electricity you can cook
And still retain that well dressed look."
MRS. EUGENE WALTHALL, R.F.D. 1, Mission, Texas

"The electric 'chef' on visiting day
Cooks perfect meals while you're away."
MRS. J. A. CLARK, R.F.D. 1, Buhl, Idaho

"Tastier the food—sweeter the look
Is that prepared by an electric 'cook'"
S. S. FUKUDA, R.F.D. 2, Box 278, Salem, Ore.

My title for the August Front Cover picture of ELECTRICITY ON THE FARM is.....

.....

(a)—What is the first electrical equipment or appliance that you secured after your electric service and lights were connected? .....Why? .....

.....

My Name is .....R.F.D. .....

Post Office..... .....County.... .....State .....

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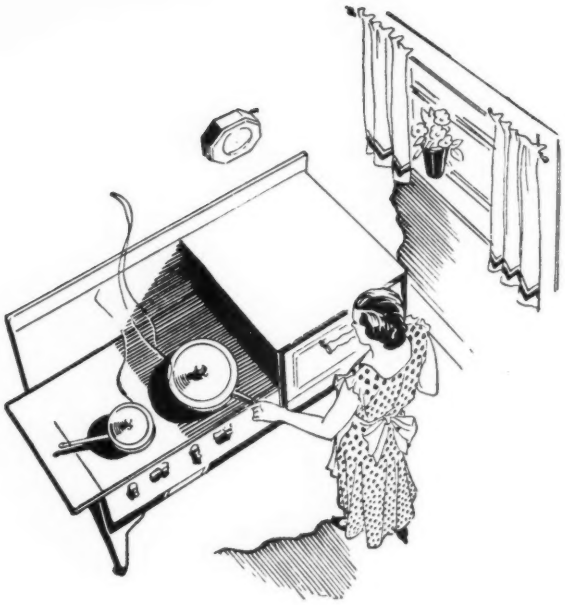

You Can CAN and keep COOL with ELECTRIC Cookery

Now you can feel the joy of a well-stocked cellar without enduring the choking heat and inaccurate results of old style canning.

The modern ELECTRIC Range with its oversize, thickly insulated oven, keeps the heat inside. Absolutely accurate, unwavering temperature gives you perfect results every time. No pre-sterilizing or watchful waiting is necessary this new way.

See your nearest Electric Dealer or ask Your Power Company for further information.

Electricity on the Farm

24 West 40th Street, New York

6 North Michigan Avenue, Chicago